



10MHz Active Redundancy Switch With Unity gain

Typical applications:

- Teleports & Earth Stations
- Satellite Operations
- Government & Defence applications
- Telemetry, Tracking & Command
- High Resilience applications

SWF-G2S-Y-124-xxxxx is a hot swap, redundancy switch operating over -10 to +10dBm mean power. The module incorporates RF detection at each of its input ports and switches over if the level differs by more than 2 to 10dB, customer settable. It can be used to operate with optical receivers from the StingRay Genus chassis series.

Switch Module



Switch Module

Compact form factor allowing multiple modules to be housed in the Genus chassis. Each module occupies 1 slot in the chassis.



10 MHz operating frequency



Hot Swap & replaceable RF module



2x1 Redundancy Switch with unity gain

Chassis Options



Local control & monitoring via HMI high resolution touchscreen



Flexible Module Configurations choose from a mixture of switch modules with different operating frequencies.



Resilience from dual redundant hot -swap power supplies & field replaceable CPU & HMI



Remote control & monitoring via RJ45 Ethernet port with SNMP & web browser interface



Compact indoor & outdoor chassis options, which can be part populated



Field replaceable Internal 10MHz reference source and external reference inject port with auto detection (optional)



Secure protocols with SNMPv3



Indoor Chassis



Outdoor Unit





Preliminary Technical Specifications and Operating Parameters

RF Parameters		
Model Number	SWF-G2S-Y-124	
Frequency Range	10MHz	
Gain	0 dB ± 1.5 dB	
Return Loss	50 ohm SMA (All RF ports are DC blocked) 21 dB typical, 18 dB minimum	
Isolation	60 dB minimum (0dBm tone across operational bandwidth unselected input to output)	
1dB Gain Compression Point	+12 dBm minimum (output power)	
OIP3	+24 dBm minimum	
Noise Figure	18dB typical, 20 dB maximum	
RF Signal Range	Output: -70dBm to -10dBm (total power) o/p range available under all i/p conditions. (Note that all Specifications are only 'typical' between -60 & -70dBm unless otherwise detailed).	
Max RF Input	16 dBm total power (Damage level, NOT operational)	
Switching Threshold	2 dB to 10 dB Differential (Customer Settable)	
Switching Delay	0 to 10 Seconds (Customer Settable)	
DC Pass	DC Blocked	
Phase Noise	1 Hz	<-128dBc/Hz
	10 Hz	<-141dBc/Hz
	100 Hz	<-152dBc/Hz
	1 kHz	<-159dBc/Hz
	10 kHz	<-162dBc/Hz
	100 kHz	<-163dBc/Hz
	1 MHz	<-163dBc/Hz
Non RF Parameters		
Power Consumption	<3W	
Module Swap	Hot Swap	
Control, Monitoring & Alarms		
Temperature	Each module monitored	
Monitoring Includes	Status of amplifier stage, supply voltage, temperature	
Control	Local and Remote via parent chassis	
Environmental Conditions		
Operating Temperature	-20°C to +60°C	
Storage Temperature	-40°C to +90°C	
Location	Indoor use (ODU options available)	
Humidity	20 to 90% non-condensing	
Altitude	10,000ft AMSL	
Mass	0.4kg typical	
Size	19mm Width x 87mm Height x 225mm Depth	
Spec Issue	0.1	

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.
 Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

ETL SYSTEMS LIMITED
Coldwell Radio Station
Madley
Hereford
England HR2 9NE

TELEPHONE
+44 (0)1981 259020

EMAIL
info@etlsystems.com

FACSIMILE
+44 (0)1981 259021

WEB
www.etlsystems.com

